



Sun Valley

Area Drainage Master Plan

October 2006



Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, Arizona 85009

PUBLIC MEETING/OPEN HOUSE ANNOUNCEMENT

Supervisor Max Wilson, District 4



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Introduction

Since its inception in 1959, the Flood Control District of Maricopa County (District) has provided flood control services to County residents in order to ensure public safety and to protect property from flooding. As commercial and residential development in the West Valley forges beyond the White Tank Mountains, the District is working to ensure proper floodplain management and coordination of flood control infrastructure improvements is accomplished.

The District is nearing completion of Step 3 of a three-step process to develop a drainage master plan for the Sun Valley area, located within western Maricopa County. The District will also identify potential multi-use and recreational facilities that will complement and enhance the proposed project area as part of the plan.



Looking south from near Wagner Wash and Sun Valley Parkway; the western piedmont of the White Tank Mountains.

About the Study

The purpose of the Sun Valley Area Drainage Master Plan (ADMP) is to develop a conceptual drainage plan to serve as a roadmap that jurisdictional authorities and developers can use in planning flood control measures to mitigate flood hazards up to the 100-year event. The ADMP incorporates development plans for the area and jurisdictional drainage policies to develop a preferred regional flood control solution.

The study area has numerous alluvial fans downstream of the White Tank Mountains. Alluvial fans are fan-shaped sediment deposits located at the topographic break, such as a mountain front, that are made up of streamflow and/or debris flow sediment. Alluvial fans are hazardous because their flood flow path is unpredictable, and because of the

potential for extreme erosion and sedimentation. Alluvial fans cover large areas of the White Tank Mountains and in order to develop private property within the fans developers have incorporated structural and non-structural solutions to address the hazards associated with them.

During the initial Step 2 Proposed Alternatives Analysis, multiple stakeholder meetings and a public meeting were held to discuss the alternatives development. The plan was developed with input from developers and their engineers to comprise whole-fan solutions by controlling runoff from the fan's apex (the point where the flows start to split) down to the outfall.

Structural and non-structural alternatives were developed and

Open House

6:00–8:00PM

Presentation: 6:30–7:00PM
Thursday, October 18, 2006
Buckeye Community Center
201 E. Centre, 623-349-6600

The purpose of the Open House is to present the recommended alternative, allow the public the opportunity to talk informally with project team members, and provide input about the Sun Valley ADMP. Public comment will also be sought following the presentation of the floodplain delineations

Visit the District's Web site at www.fcd.maricopa.gov.

About the Study
-continued

evaluated as part of Step 2 of the Sun Valley ADMP. The refined alternatives include both non-structural and environmentally friendly, aesthetically compatible structural flood control measures. For example, structural alternatives include an on-line basin at the fan's apex and restricted natural corridors to take the flows downstream in a controlled manner, while non-structural methods include floodplain delineations, which will not allow homes and buildings within the high hazard areas.

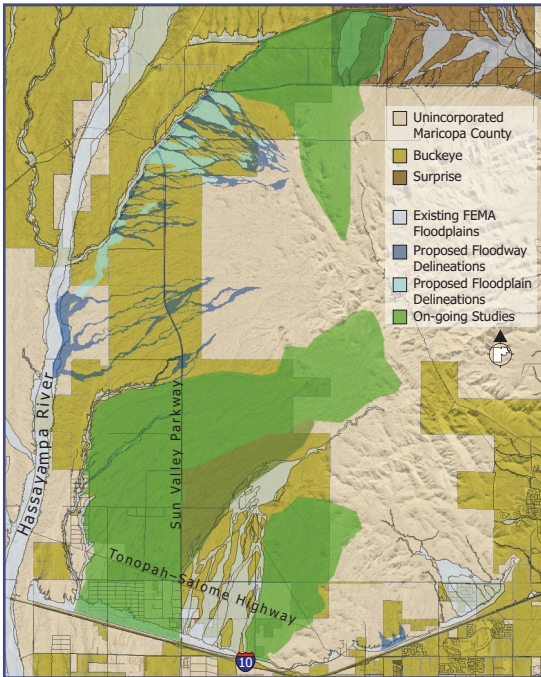
The proposed alternatives were evaluated for their flood control function, economic costs, environmental impacts, permitting issues, visual and aesthetic characteristics, and recreation and multiple-use opportunities.

In Step 3, the recommended alternative was further refined with consideration given to engineering elements and the cost estimates. Special attention was given to maximizing non-structural, floodplain management approaches along the preferred corridor alignments.

The Town of Buckeye, Arizona was a project participant. The ADMP was performed by JE Fuller/ Hydrology & Geomorphology, Inc., with sub-consultants C.L. Williams Consulting, Inc., Logan Simpson Design, Inc., AMEC Earth & Environmental, EDAW Inc., and Richard H. French, Ph.D., P.E.

Floodplain/Floodway Delineations

As part of the Sun Valley ADMP the District performed floodplain/floodway delineations of resulting in approximately nine square miles of alluvial fan approximate floodplain delineations. These included Alluvial Fan Approximate Zone A designations as well as Alluvial Fan Approximate Zone A Administrative Floodway designations. Alluvial fan flooding is a special flood hazard characterized by unstable channel positions and unknown flow distributions at and downstream of the apex (most upstream portion of an alluvial fan landform).



The delineation study area is generally bounded by the Central Arizona Project Canal on the North, Wagner Wash and the Hassayampa River on the West, White Tank Mountains on the East, and the Buckeye Flood Retarding Structures 1 and 2 on the South.

After the delineations are submitted to the Federal Emergency Management Agency (FEMA), the approval process can take one year or longer. Flood insurance will not be required for affected homeowners until it is adopted and the Flood Insurance Rate Map panels are updated. However, the delineation maps will be used as best technical information to guide adjacent development. A detailed fact sheet outlining the floodplain/floodway delineations will be available at the October 18 public meeting and on the project Web site at www.fcd.maricopa.gov.

Study Area

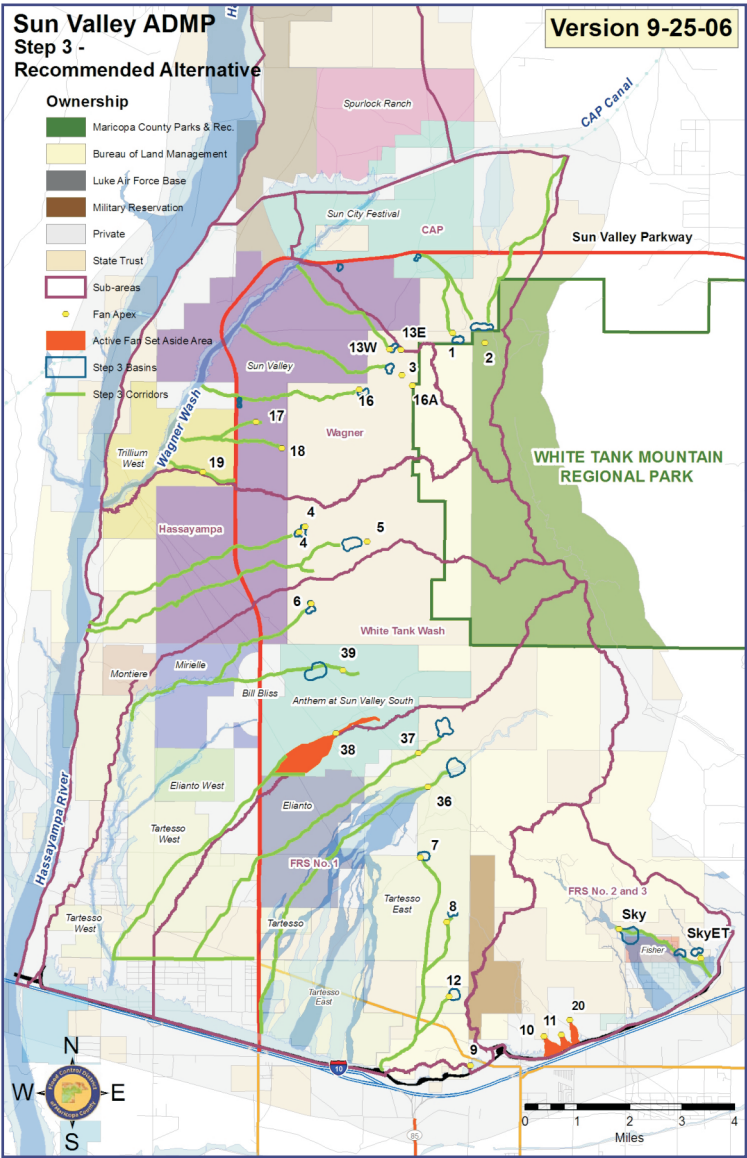
The study area, approximately 183-square miles, is bounded by the White Tank Mountains and Trilby Wash on the east, the Hassayampa River on the west, the Buckeye Flood Retarding Structures on the south and Gates Road to the north. The watercourses within the study area are all tributaries to the Hassayampa River or the Buckeye Flood Retarding Structures, except Fan 2 which is a tributary to Trilby Wash.

Next Steps

The Recommended Alternative (Plan) will be described at the public meeting. After the public meeting, comments about the Plan will be reviewed and incorporated if appropriate. The Plan and associated reports will be completed by the end of December 2006.

The first group of floodplain delineations will be submitted to FEMA for review in December 2006. A second public meeting will be held in the spring 2007 to provide information about the second group of floodplain delineations. After comments have been addressed, they will be sent to FEMA for review. The District will use the information as Best Available Technical Data to regulate the floodplains in the area while FEMA is completing their review. As the master planned communities are built and incorporate elements of the recommended plan, the floodplains will be revised to reflect flood control features and sent toFEMA to be incorporated on the Flood Insurance Rate Maps (FIRM).

As the Master Plan Developments move through the Buckeye Planning Process, the District will continue to be involved to ensure incorporation of the Plan. The District will also identify areas needed to complete the Plan that are not within a Master Plan Development and will take the necessary steps to ensure continuity of the Plan.



Projected Schedule

Alluvial Fan Delineation

Floodplain Delineation Studies
Submit to FEMA for review

Planning Analysis

Step 1: Preliminary Alternatives
Step 2: Proposed Alternatives
Step 3: Recommended Alternative

Public/Stakeholder Involvement

Landscape Planning & Design

Implementation & Maintenance Plan

Table with 3 main columns for years (2005, 2006, 2007) and sub-columns for months (JUL-SEP, OCT-DEC, JAN-MAR, APR-JUN, JUL, AUG, SEP, OCT, NOV, DEC, JAN, FEB, MAR). Rows represent project phases: Alluvial Fan Delineation, Planning Analysis, Public/Stakeholder Involvement, Landscape Planning & Design, and Implementation & Maintenance Plan. A legend indicates a blue dot for Public Meeting.

Public Meeting

Related Project

Buckeye FRS No. 1 is the western most dam of a system of three dams that parallels the north side of Interstate 10 for 7.1 miles west to the Hassayampa River. The dam is operated and maintained by the District and is regulated under the jurisdiction of the Arizona Department of Water Resources (ADWR).

The District is conducting a planning study intended to develop project alternatives to address dam safety issues and to maintain flood control benefits to downstream properties for the long-term. The District is seeking federal funding assistance for this project from the Natural Resources Conservation Service. Alternatives may include a modified dam, floodways, or basins, which will provide a minimum of 100-year flood protection.

The District will be coordinating with local stakeholders and with the public to select an implementable alternative that meets project requirements and objectives.

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The District will distribute newsletters and other informational materials at key milestones in the project.